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unpatentable over McConkey in view of Potter. Claims 5-6 and 12-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over McConkey in view of Potter and further in view of Remillard et al.

The prior art rejections

Applicant will advance arguments hereinbelow to illustrate the manner in which the presently claimed invention is patentably distinguishable from the cited and applied prior art. Reconsideration of the present application is respectfully requested. The rejection by the Examiner of Claims 1-13 under 35 U.S.C. 103 is respectfully traversed.

The prior art of record fails to disclose or suggest the combination of Applicant's essential structural features as set forth by Claims 1-14. Applicant's invention is directed towards a programmable, variable volume and pressure, coolant supply system for regulating the amount of coolant flow to a cutting tool by controlling the speed of a coolant pump. The coolant supply system comprises a fluid control unit and an electrical control panel, wherein the fluid control unit includes a pump and a AC pump motor operatively connected thereto, and the electrical control panel includes a power supply, a computer, a variable frequency drive, control relays, and a junction block for making electrical connections to the control panel. The computer receives signals from the tool and a pressure transducer, and is programmed with information

concerning the total flow area of the coolant orifices. Using this information, the computer determines an ideal pump speed, and sends a control signal to the variable frequency drive which in turn determines the pump motor speed. The coolant supply system also preferably includes a coolant supply line for routing coolant from the pump to the tool, a catch pan for collecting recycled coolant from the tool, a filter for removing impurities from the used coolant, a reservoir for storing coolant, and a return line for routing the recycled coolant to the reservoir and from the reservoir to the pump inlet.

The patent to McConkey was applied to show a typical high pressure coolant system for machine tools. But, as noted by the Examiner, the pressure coolant system for machine tools disclosed in McConkey does not have an AC electric pump motor, at least one fluid pressure transducer, a variable frequency drive and a programmable computer to monitor coolant pressure.

Potter was applied by the Examiner to show a variable frequency drive water delivery system having a plurality of pumps, and as asserted by the Examiner, discloses the elements that McConkey lacks. However, fluid delivery system disclosed by Potter is used for pumping water in commercial buildings, office buildings, high rise complexes, stadiums, and the like, (column 4, lines 54-61) and fails to teach a variable frequency drive coolant drive system for machine tools.

Remillard et al., which teaches a system for washing chips from the inside diameter of a workpiece, was relied upon by the Examiner as teaching a catch pan for receiving chips and a fluid, as well as a filter screen for separating the fluid from the chips.

Thus, the Examiner concludes that it would have been obvious to modify the high pressure machine tool coolant system disclosed in McConkey to include the structural elements of -an AC electric pump motor, at least one fluid pressure transducer, a variable frequency drive, a programmable computer to monitor coolant pressure, a coolant catch pan between the tool and the coolant return line and a coolant filter in the catch pan- disclosed in the ancillary references to Potter and Remillard et al., in order to achieve the apparent advantages of Applicant's invention.

Notwithstanding the Examiner's position, Applicant respectfully submits that there appears no motivation or suggestion in the prior art that the machine tool coolant system disclosed in McConkey may be modified in the manner set forth by the present claims to achieve Applicant's intended purpose. "The mere fact that the prior art may be modified as suggested by the Examiner does not make the modifications obvious unless the prior art suggests the desirability of the modification". *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992). Moreover, Applicant notes that obviousness cannot be shown by combining the teachings of the prior art unless there is some teaching or incentive supporting the combination. *ACS Hospital Systems, Inc. v. Montefio-*

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re Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984); *In re Geiger*, 815 F.2d at 688, 2 USPQ2d at 1278 (Fed. Cir. 1987).

In this regard, Applicant submits that one of ordinary skill in the art would not be persuaded to incorporate a) the computer controlled variable frequency drive water delivery system to buildings and the like disclosed in Potter, and b) the catch pan and filter screen disclosed in Remillard et al., in order to modify the machine tool coolant system disclosed in McConkey to provide a pump with higher flexibility at variable speeds, and to aid the filtering system in removing chips from the fluid flow, respectively, as alleged by the Examiner, to arrive at Applicant's invention as presently set forth by the claims.

Under Section 103(a), there must be some objective teaching in the prior art that would have motivated one of ordinary skill in the art to arrive at the claimed invention as a whole. *In re Fine*, 5 USPQ2d 1596, 1599-1600 (Fed. Cir. 1988). The combined teachings afforded by the prior art of record do not suggest Applicant's claimed invention having the combination of structural features called for by the present claims. Applicant respectfully submits that for at least these reasons, independent Claims 1, 7 and 14 and

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all remaining claims dependent therefrom, are allowable over the prior art applied of record.

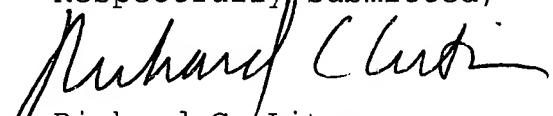
Drawing objections

The Draftsperson's objections to the drawings as filed in the "Notice of Draftsperson's Patent Drawing Review" (PTO form-948) have been noted. These objections will be taken care of upon the filing of the formal, inked drawing boards, which will be accomplished no later than upon submission of the issue fee.

SUMMARY

Applicant respectfully submits that for at least these reasons, Claims 1-13, and newly added claim 14, are allowable over the prior art applied of record. For the foregoing reasons, Applicant respectfully submits that the present application is in condition for allowance. If such is not the case, the Examiner is requested to kindly contact the undersigned in an effort to satisfactorily conclude the prosecution of this application.

Respectfully submitted,



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RCL:SJS